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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,915	09/29/1999	MATTHEW B. SQUIRE	2204/191	3365

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EXAMINER

MIRZA, ADNAN M

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/407,915

Applicant(s)

SQUIRE ET AL.

Examiner

Adnan M Mirza

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Examiner considered the amended claims 1,15,29,43 and 57.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claim 1 is rejected under 35 U.S.C 102(e) as being anticipated by Monot (U.S. 6,012,088).

As per claim 1, Monot discloses a method of configuring a first network device for connection to a communications network subnet having a second network device, the method comprising: non-iteratively determining, with a configuration determination module of the first network device, configuration attributes for operably connecting the first network device to the subnet (col. 2, lines 10-40); configuring the first network device, with an auto configuration module of the first network device, accordingly to the configuration attributes so that the first network device is operably connected to the subnet (col. 2, lines 41-63).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) as applied to claim 1 above, and further in view of Li et al. (U.S. 6,012,088).

As per claim 1, Hansen teaches a method of configuring a first network device for connection to a communications network subnet having a second network device, the method comprising: determining, with a configuration determination module of the first network device, configuration attributes for operably connecting the first network device to the subnet (col. 2, lines 39-67); Hansen does not explicitly disclose configuring the first network device, with an auto configuration module.

However, Li teaches configuring the first network device, with an auto configuration module of the first network device, accordingly to the configuration attributes so that the first network device is operably connected to the subnet (col. 3, lines 23-67).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate an auto configuration module to a communications network in the method of Hansen to increase the efficiency of the network by reducing the down time in the network.

6. Claim 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) as applied to claim 1 above, and further in view of Li et al. (U.S. 6,012,088).

As per claim 15, Hansen teaches an auto configuring data router connected to a communications network subnet having a second network data router, the auto configuring data router comprising: a configuration determination module that non-iteratively determines configuration

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attributes for operably connecting the auto configuring data router to the subnet (col. 5, lines 13-21);

Hansen fails to disclose auto configuration module that configures the auto configure data router.

Li teaches an auto configuration module that configures the auto configure data router according to the configuration attributes so that the auto configuring data router is operably connected to the subnet (col. 3, lines 23-61).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate an auto configuration module that configures the auto configure data router according to the configuration attributes so that the auto configuring data router is operably connected to the subnet as taught by Li in the method of Hansen to reduce the latency of configuring data router which result in increasing productivity of the method.

7. Claim 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) as applied to claim 1 above, and further in view of Li et al. (U.S. 6,012,088).

Regarding claim 29, Hansen teaches a computer network having at least one sub network, the at least one sub network having a plurality of data routers that communicate data packets over the network, the sub network including at least one auto configuring data router, the at least one auto configuring data router comprising: a configuration determination module that non-iteratively determines configuration attributes for operably connecting the auto configuring data router to the subnet (Fig. 1A, col. 4, lines 48-67 & col. 5, lines 1-35);

Hansen fails to disclose auto configuration module that configures the auto configure data router.

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Li teaches an auto configuration module that configures the auto configure data router according to the configuration attributes so that the auto configuring data router is operably connected to the subnet (Fig. 1, element 10, col. 4, lines 46-67, col. 5, lines 1-23 & col. 9, lines 11-26).

It would have been obvious to one having ordinary skill in the art at the time that invention was made to have incorporated an auto configuration module that configures the auto configure data router according to the configuration attributes so that the auto configuring data router is operably connected to the subnet as taught by Li in the system of Hansen to increase the productivity by making the system automated.

8. Claim 43 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) as applied to claim 1 above, and further in view of Li et al. (U.S. 6,012,088).

As per claim 43, Hansen teaches a computer program product for use on a computer system for configuring a first network device for connection to a communication network subnet having a second network device, the computer program product comprising a computer-usable medium having computer-readable program code thereon, the computer readable program code including: program code for non-iteratively determining configuration attributes for operably connecting the first network device to the subnet (col. 3, lines 49-61);

Hansen fails to disclose program code for configuring first network device.

Li teaches a program code for configuring the first network device according to the configuration attributes so that the first network device is operably connected to the subnet (Fig. 6, col. 8, lines 5-13 & lines 44-50).

It would have been obvious to one having ordinary skill in the art at the time that invention was made to have incorporated the program code for configuring first network device as taught by Li

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in the method of Hansen to help in simplifying the management of network devices by using the tool of program coding.

9. Claims 57 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) in view of Li as applied to claim 1 above and further in view of Monot (U.S. 5,708,778).

Regarding claim 57, Hansen teaches an auto configuring data router connected to a communications network subnet having a second network data router, the auto configuring data router comprising: means for non-iteratively determining configuration attributes for operably connecting the auto configuring data router to the subnet (col. 5, lines 13-21 & col. 6, lines 53-61).

Hansen fails to disclose means for configuring the auto configuring data router.

Monot teaches means for configuring the auto configuring data router according to the configuring attributes so that the auto configuring data router is operably connected to the subnet (Fig. 3, element 110, col. 4, lines 5-32).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate means to configure the auto configure data router in communications network in the method of Hansen to increase the efficiency of the network system in terms of latency.

10. Regarding claims 2, 16, 30, 44, 58, Hansen-Li taught configuring the first network device automatically by the auto configure module (Li, col. 3, lines 46-61).

11. Regarding Claims 3, 17, 31, 45, 59, Hansen-Li taught configuring the first network device as a guided process in which the auto configuration module interacts with user and

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presents to the user suggested configuration choices based on the configuration attributes (Li, col. 9, lines 26-59).

12. Regarding claims 4, 18, 32, 46, 60, Hansen-Li taught accompanying configuration choices by an explanation to the user as to why the configuration choices have been suggested (Li, col. 9, lines 13-25).

13. Regarding claims 5, 19, 33, 47, 61, Hansen-Li taught configuration attributes comprise an IP subnet mask (Li, col. 3, lines 46-61).

14. Regarding claims 6, 20, 34, 48, 62, Hansen-Li taught configuration attributes comprise at least one of Dynamic Host Configuration Protocol (DHCP) forwarding data and DHCP server address (Li, col. 15, lines 60-66).

15. Claims 7, 21, 35, 49, 63 rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 5,838,907) in view of Li et al. (U.S. 6, 012, 088), and further in view of Reichmeyer et al. (U.S. 6, 286, 038).

Regarding claims 7, 21, 35, 49, 63, Hansen-Li- Reichmeyer taught configuration attributes comprises virtual local area network (VLAN) information including tag identifications, types, protocols, addresses, and port-to-VLAN mappings (col. 7, lines 20-31).

Hansen and Li fail to disclose the VLAN information as configuration attributes.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made incorporated the VLAN information as configuration attributes in the methodology of Hansen and Li to increase the efficiency of the networking method by making it more diversified.



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16. Regarding claims 8, 22, 36, 50, 64 Hansen-Li- Reichmeyer taught configuration attributes comprise at least one of the Spanning Tree Group information, Simple Network Management Protocol (SNMP) server addresses (Reichmeyer, col. 4, lines 44-50). OSPF, RIP and VRRP are well know routing protocols in routing configuration of a router and according to Network working group RFCs Open Shortest Path First (OSPF) timer information (RFC 1583), Routing Information Protocol (RIP) broadcast timer information (RFC 2453), and Virtual Router Redundancy Protocol (VRRP) information (RFC 2338) are very well explained.

17. Regarding claims 9, 23, 37, 51, 65, Hansen-Li- Reichmeyer taught determining configuration attributes further comprises communicating with a network centralized configuration server (Li, col. 10, lines 6-16).

18. Regarding claims 10, 24, 38, 52, 66, Hansen-Li-Reichmeyer taught configuring network centralized server using Simple Network Management Protocol (SNMP) to communicate (Reichmeyer, col. 4, lines 44-50).

19. Regarding claims 11, 53, 67, Hansen-Li-Reichmeyer taught communicating with a network centralized configuration server comprises: sending to the centralized configuration server a message containing addresses of network neighbours on the subnet (Reichmeyer, Fig. 3, col. 5, lines 26-67); searching in a configuration database of the centralized configuration server for configuration attributes relevant to the first network device (Reichmeyer, col. 6, lines 66-67 & col. 7, lines 1-10); and forwarding the configuration attributes from the configuration database to the first network device (Reichmeyer, col. 6, lines 36-42).

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20. Regarding claims 12, 26, 40, 54, 68, Hansen-Li-Reichmeyer taught determining configuration attributes further comprises communicating with the second network device (Hansen, col. 2, lines 39-67)

21. Regarding claims 13, 27, 41, 55, 69, it is well known in the art of networking according to networking group RFCs that communicating with the second network device using a protocol based on Internet Control Message Protocol (ICMP) (RFC 1885) or User Datagram Protocol (UDP) (RFC 1240).

In the field of networking ICMP and UDP are very common networking protocols and very well explain according to Networking group RFCs. Hansen-Li-Reichmeyer taught

22. Regarding claims 14, 28, 42, 56, 70, Hansen-Li-Reichmeyer taught determining configuration attributes comprises analyzing routing protocol control packets be detected by first Network device (col. 15, lines 17-67 & col. 16, lines 1-4).

23. Regarding claims 25, 39, Hansen-Li-Reichmeyer taught configuration determination module receives relevant configuration attributes from the centralized configuration server (Reichmeyer, Fig. 6, col. 10, lines 26-67).

24. Applicant made the following arguments:

a) In regards of claim 1 applicant argues that Monot's iterative approach sends out and receives multiple messages for each parameter value that it configures. While this may be acceptable under some network conditions, it would be disadvantaged under some conditions, such as when the network routes are re-converging after an equipment failure. Under such

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conditions, Monot's iterative flooding of messages would be a definite drawback, especially in contrast to the non-iterative approach.

b) In terms of claim 1 applicant argues about Hansen that the network does all the work when a new device is added, and the new device is "stupid".

c) In regards of claim 1 applicant argues about Li saying that a new network device does not determine for itself its configuration attributes, but rather "downloads configuration data from a configuration server containing customer site specific configuration data."

25. Response to arguments above made by the applicant:

1) Iterative and non-iterative is very broad. Monot's patent talks about keep changing parameters of network devices like Packet size or Bandwidth or Packet format that changes continuously. If Monot receives different size packet or format then it probes the device to get the right format therefore Monot used the words "may be comprised of series of probe" on (col. 4, lines 5-19). In normal circumstances it is not necessary to do series of probes only in special circumstances. Applicant argues about iterative flooding of messages after an equipment failure which is very vague and need more clarification but in regards of argument applicant fail to realize that Monot's system is part of Networking system and at the time of the filing application the Networks were smart enough to detect the failure of network device and stopped probing it.

2) Applicant's argument in regards to claim 1 about the Hansen's reference is very vague and broad. Applicant argues that in Hansen's system the device is "stupid". In the Networking arena when device try to connect to a system, the system decides if the device has the same

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configuration attributes and if it is compatible with its system. Also the device is also very broad word and it can cover a vast number of technologies using devices.

3) In regards to argument (c), It is just a matter of choice the configuration attributes can be saved any where in the memory of any computer system. The configuration attributes can be accessed locally or remotely and it will not affect the system itself. The argument is again very vague and broad.

### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicants disclosure.

Martin et al (U.S. 5,867,706) discloses the name convention of the resources over the network.

27. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Adnan Mirza whose telephone number is (703)-305-4633.

28. The examiner can normally be reached on Monday to Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703)-305-4815. The fax for this group is (703)-746-7239.

29. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-746-7239 (For Status Inquiries, Informal or Draft Communications, please label "PROPOSED" or "DRAFT");

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(703)-746-7239 (For Official Communications Intended for entry, please mark "EXPEDITED PROCEDURE"),

(703)-746-7238 (For After Final Communications).

30. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C.20231

Or faxed to:

Hand-delivered responses should be brought to 4<sup>th</sup> Floor Receptionist, Crystal Park II,  
2021 Crystal Drive, Arlington, VA 22202.



Adnan Mirza

Examiner

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MEHMET B. GECKIL  
PRIMARY EXAMINER

